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## **SELF-DESCRIPTIVE MICROPHONE ARRAY**

### **ABSTRACT OF THE INVENTION**

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A self-descriptive microphone array includes a microphone array memory, such as, for example a ROM, EEPROM, or other conventional memory, which contains a microphone array device description. This device description includes parametric information which defines operational characteristics and configuration of the microphone array. In further embodiments, the microphone array uses any of a variety of conventional wired or wireless computer interfaces, including serial, IEEE 1394, USB, Bluetooth™, etc., to connect to a computing device. Once connected, the microphone array provides its device description to the computing device. Sound processing software residing within the computing device is then automatically configured for optimally interacting with one or more analog or digital audio signals provided by the microphone array. In another embodiment, the microphone array performs integrated self calibration for automatically updating the device description. The self calibration is performed either upon connection to the computing device, or upon regular or user-specified intervals.

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